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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,631	09/04/2003	Jean-Marie Gatto	CYBS5872	8128

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EXAMINER	
THOMASSON, MEAGAN J	
ART UNIT	PAPER NUMBER
3714	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/656,631	GATTO ET AL.	
	Examiner	Art Unit	
	MEAGAN THOMASSON	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,15-19,21-61,63-92,108 and 109* is/are pending in the application.

4a) Of the above claim(s) *13,15-19 and 21-61,66-77* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,63-65,78-92,108 and 109* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/16/07, 4/14/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The examiner acknowledges the amendments made to claims 1,4,79 and 108. Claims 13,15-19,21-61 and 66-77 are withdrawn; claims 14,20,62,93-107 and 110 have been canceled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-12,63-65,78-92,108 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mockapetris "Analysis of Reliable Multicast Algorithms for Local Networks" (USC Information Sciences Institute,1983), herein referred to as Mockapetris, in view of Nguyen (US 2004/0002385 A1).

Regarding claims 1,108 Mockapetris discloses an online system and method comprising a communication network, at least two central servers, each of the at least two servers being coupled to the network, at least one client terminal coupled to the at least two central servers through the communication network in a client-server configuration in which each of the at least one gaming machine is a client to the at least two central servers, each of the at least one client terminals being configured to carry out a transaction and to commit each transaction to each of the at least two central servers by sending a separate transaction packet to each of the at least two central servers, each of the separate transaction packets sent to each of the at least two central servers include an inbound payload, wherein each of the at least two central servers, upon receipt of the inbound game payload, are configured to return an outbound payload to the gaming machine having sent the transaction packet, the outbound payload enabling the client terminal having sent the transaction packet to complete the transaction.

Specifically, Mockapetris discloses a multicast algorithm for communication networks wherein redundant copies of a data packet are transmitted from a single client terminal to multiple servers (P. 150, col. 2, 1st paragraph, "a given transmission goes to all destinations"; 3rd paragraph, "Multicast queries enable multiple servers to process queries in parallel … multicast allows for rapid update of redundant copies). Further, in the multicast system disclosed by Mockapetris, each server having received said transmission responds by returning an outbound transmission to the gaming machine having sent the transaction packet (P. 152, Multicast Implementations, actions 2-4;

including "Generation and transmission of acknowledgements from receivers to the sending host"). The acknowledgements received by the client terminal enable completion of the transaction (P. 152, Multicast Implementations, action 5; "Acknowledgement processing at the sending host").

Mockapetris does not disclose the implementation of the multicast system in a gaming system, wherein the client terminal is a gaming machine configured to play at least one game and to carry out a game transaction for each game played, and further that the inbound data packet is a game payload. However, in an analogous network communication system, Nguyen discloses a client terminal, i.e. gaming machine **302**, connected to at least two central servers (host server **328,** cashless system server **144**, progressive system server **147**), wherein the gaming machine is configured to play at least one game, to carry out a game transaction for each game, and to commit each game transaction to a central server via transmission of a data packet (¶ 0017, ¶0019, ¶0039). Further, Nguyen specifically discloses there may be more than one host server in the communications network (¶0039). Therefore, it would have been obvious to one of ordinary skill in the art to combine the multicast data transmission system of Mockapetris with the gaming communications system of Nguyen as all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results.

Mockapetris/Nguyen do not specifically disclose the at least one gaming machine is configured such that a first arriving outbound payload received by the at least one

gaming machine is effective to complete the game transaction, irrespective of when and if a second later arriving outbound payload is received by the at least one gaming machine. Mockapetris discloses that acknowledgements sent from the target hosts are received and processed at the sending host (P. 152, Multicast Implementations, action 5; "Acknowledgement processing at the sending host"), and further that an acknowledgement transmission is sent from each target host to the sending host (P. 153, separate acknowledgment algorithms paragraph). P. 152, 2nd column, of Mockapetris states that "Our goal is to optimize the multicast potential of the medium without incurring excessive cost in terms of processing events in the receivers of the distribution. This goal is achieved through measures ... ***to rapidly discard irrelevant or duplication transmissions***" (emphasis added).

Nguyen discloses receiving transmissions at a sending host, i.e. the gaming machine, from a target host, i.e. the central DCU server as described above. Nguyen further discloses that the transmissions received from the central servers may be used to complete a gaming transaction in ¶0047,0049, citing specific examples of a cashless transaction authorization. Therefore, if the multicast system of Mockapetris is combined with the gaming network for authorization of cashless transactions of Nguyen, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize only the first arriving inbound payload to complete the transaction, irrespective of when and if a second later arriving outbound payload is received by the at least one gaming machine, as it would only require a single authorization to complete the cashless gaming transaction and Mockapetris specifically discloses discarding duplication

transmissions in order to avoid excessive processing costs. A second authorization message received from a second server would be redundant and unnecessary as the first authorization message would provide sufficient authorization to complete the transaction. For instance, if a player requests funds to be transferred directly from an outside financial account directly to a gaming machine, a single authorization message received from the central server would be sufficient to process the transaction, irrespective of if and when a second authorization message is received. The second message would not be necessary, and could be disregarded by the gaming machine without an interruption of the transaction process.

Regarding claims 2,80, Mockapetris discloses each of the at least two central servers returns a game transaction commit acknowledgement to the at least one gaming machine (P. 152, Multicast Implementations action 4).

Regarding claims 3,81,96 *Mockapetris does not specifically disclose acknowledging to a player the validity of a game transaction upon receipt of the at least one game transaction commit acknowledgment during a predetermined timeout period.* However, Mockapetris does disclose the use of timeout periods on P. 153, 1st paragraph, wherein the system requires “restrictions on the packet lifetime”. Nguyen discloses the gaming machine is configured to acknowledge to a player a validity of the game transaction upon receipt of at least one game transaction commit acknowledgement in that the receipt of data transmitted from the server to the gaming terminal enables game play, e.g. cashless transaction authorizations (¶0049, ¶0068)

thus the enabling of game play is in itself an acknowledgement to a player of the validity of the game transaction.

Regarding claims 4,82,97 Mockapetris inherently discloses that the payload includes at least one of a machine ID, a user/player ID, a transaction GUID, a machine originating/return address, a game ID, a game bet and an amount wagered. That is, the communication system disclosed by Mockapetris includes the generation and transmission of acknowledgements from receivers to the sending host (P. 152, Multicast Implementations action 4). Therefore, the receiving server must receive a data transmission containing an originating/return address in order to transmit an acknowledgement of receipt of said data transmission to the sending host.

Regarding claims 5,83,98 Nguyen discloses the at least one gaming machine is configured to be an active participant in a fault tolerance of the online gaming system. That is, Nguyen discloses the ability of the DCU to choose a data transmission path by which gaming data is sent to the central server in the event of a communication disruption, or fault (¶0084-0088). Further, Nguyen discloses an embodiment of the invention wherein the DCU may be located on a gaming machine (¶0091).

Regarding claims 6,7,84,99,100 Nguyen discloses the at DCU is configured to record a synchronization log that includes identifiers of any transactions that were not acknowledged by a non-responding one of the central servers, the synchronization log being used to subsequently send the unacknowledged transactions to the non-responding one of the at least two central servers, wherein the non-responding central server is configured to be synchronized by receiving the unacknowledged transactions

directly from the DCU subsequent to communication begin re-established therewith (abstract, ¶0043, ¶0089). Further, as previously stated, the DCU may be located on a gaming machine (¶0091).

Regarding claims 8,85,101 Nguyen discloses the communication network is the internet (¶0111). *Nguyen does not specifically disclose a protocol to transport a payload of each game transaction is UDP.* However, Nguyen does disclose the ability to support multiple data transport protocols (¶0103). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize UDP as the protocol to transport a payload of each game transaction. Additionally, the UDP protocol is well known in the gaming art, as evidenced by Traversat et al., (US 2002/0147771 A1), in ¶ 0150.

Regarding claims 9,86,102 *Nguyen does not specifically disclose the at least two central servers and the at least one gaming machine are configured to support instant-draw and deferred-draw of random events.* Nguyen does disclose that a gaming machine is configured to instantly determine a game outcome, e.g. in a slot machine embodiment the gaming terminal is configured to randomly determine and present a game outcome to a player (¶0003). However, it is notoriously well known in the art to enable a gaming machine to support instant-draw events, e.g. slot machine type events wherein a result is instantly determined and displayed to a player, and deferred-draw events, e.g. keno type events wherein there may be some lapse of time between when a player places a wager and the actual determination of a random event such as the drawing of the winning keno numbers, as evidenced by LeMay et al. (US 2004/0063495

A1). LeMay discloses a network gaming system configured to support both instant-draw and deferred-draw of random events (i.e. slot machine games and keno-type games), as shown in Fig. 16 and Fig. 17, respectively. Therefore, it would have been obvious to one of ordinary skill in the art to provide this capability to the instant invention as it is notoriously well known to do so in order to increase player gaming choices at a single gaming terminal.

Regarding claims 10,87,103 Nguyen discloses a remote communications network wherein gaming terminals are linked to a remote host server (¶0004), and that there may be multiple host servers (¶0039). Therefore, it would have been obvious to one of ordinary skill in the art to allow the at least two central servers to be remote from one another.

Regarding claims 11,12, 88,89,104,105 Nguyen discloses the DCU comprises a trusted transactional cache, the trusted transactional cache being configured to process each committed game transaction received directly and independently from each of the at least one gaming machine, and to provide real time persistent storage and logging of aspects of each committed game transaction (¶0045, ¶0077, ¶0079).

Regarding claims 63,90,106 Nguyen discloses the gaming terminal is configured to initiate and terminate the game transaction (¶0003), wherein a player may begin play by placing a wager or terminal play by cashing out, as is the standard operating method of slot machine gaming devices.

Regarding claim 64,91,107 Nguyen discloses the at least one gaming machine is configured as sole master of the game transaction as, as shown in Fig. 1, the master

gaming controller **108** is located within the gaming machine **102**, wherein "the master gaming controller **108** typically controls the game play on the gaming machine **102**" (¶0012).

Regarding claims 65,71,92 Nguyen discloses an embodiment of the online gaming system wherein only the at least one gaming machine is configured for recovery from network communication errors occurring during the game transaction. That is, Nguyen discloses an embodiment of the system wherein the DCU mitigates transaction errors (¶0023) and the DCU is located on a gaming machine (¶0091).

Regarding claims 78,93, Nguyen discloses a synchronization engine and wherein the non-responding one of the at least two central servers is configured to be synchronized by receiving the unacknowledged transactions directly from the synchronization engine of a responding one of the at least two central servers. That is, Nguyen discloses the at DCU is configured to record a synchronization log that includes identifiers of any transactions that were not acknowledged by a non-responding one of the central servers, the synchronization log utilized via means for subsequently sending the unacknowledged transactions to the non-responding one of the at least two central servers, wherein the non-responding central server is configured to be synchronized by receiving the unacknowledged transactions directly from the DCU subsequent to communication begin re-established therewith (abstract, ¶0043, ¶0089). *Nguyen does not specifically disclose each of the at least two central servers includes a synchronization engine.* However, Nguyen discloses that there may be multiple central servers in direct communication with each other in order to perform network mediation

in ¶0083. Therefore, Nguyen sufficiently meets the structural limitations of the claims, and is capable of performing the claimed synchronization engine functions.

Regarding claim 79, please see claims 1 and 78 above.

Regarding claim 109, please see claims 1,78 and 79 above.

Regarding claim 110, please see claims 1 and 65 above.

Response to Arguments

Applicant's arguments filed January 22, 2008 have been fully considered but they are not persuasive.

Applicant's arguments that Mockapetris/Nguyen do not teach or suggest the limitation that a first arriving outbound payload received by the at least one gaming machine is effective to complete the game transaction, irrespective of when and if a second later arriving outbound payload is received by the at least one gaming machine are not persuasive. Mockapetris discloses that acknowledgements sent from the target hosts are received and processed at the sending host (P. 152, Multicast Implementations, action 5; "Acknowledgement processing at the sending host"), and further that an acknowledgement transmission is sent from each target host to the sending host (P. 153, separate acknowledgment algorithms paragraph). P. 152, 2nd column, of Mockapetris states that "Our goal is to optimize the multicast potential of the medium without incurring excessive cost in terms of processing events in the receivers of the distribution. This goal is achieved through measures ... ***to rapidly discard irrelevant or duplication transmissions***" (emphasis added).

Nguyen discloses receiving transmissions at a sending host, i.e. the gaming machine, from a target host, i.e. the central DCU server as described above. Nguyen further discloses that the transmissions received from the central servers may be used to complete a gaming transaction in ¶0047,0049, citing specific examples of a cashless transaction authorization. Therefore, if the multicast system of Mockapetris is combined with the gaming network for authorization of cashless transactions of Nguyen, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize only the first arriving inbound payload to complete the transaction, irrespective of when and if a second later arriving outbound payload is received by the at least one gaming machine, as it would only require a single authorization to complete the cashless gaming transaction and Mockapetris specifically discloses discarding duplication transmissions in order to avoid excessive processing costs. A second authorization message received from a second server would be redundant and unnecessary as the first authorization message would provide sufficient authorization to complete the transaction. For instance, if a player requests funds to be transferred directly from an outside financial account directly to a gaming machine, a single authorization message received from the central server would be sufficient to process the transaction, irrespective of if and when a second authorization message is received. The second message would not be necessary, and could be disregarded by the gaming machine without an interruption of the transaction process.

Further, applicant's arguments that the network system disclosed by Nguyen "never discloses any communication between such one or more host servers"

(Remarks, P. 30), and therefore does not teach or suggest the structure or functionality of the claimed invention, is not persuasive. ¶0083 of Nguyen discloses an embodiment of the gaming network featuring a plurality of central servers wherein said plurality of central servers "may also communication with one another in a peer-to-peer network (see FIG. 6)".

Additionally, applicant's arguments that the store-and-forward functionality is invoked only when the communication paths between the DCU and the host server is severed or otherwise available, and therefore does not meet the limitation of claim 79 reciting each of the two central servers are configured such that any transaction that is not acknowledged by a non-responding one of the at least two central servers is sent directly from the synchronization engine of a responding one of the at least two central servers to the synchronization engine of the non-responding central server "would not be possible if the communication paths therebetween were severed or unavailable" (Remarks, P. 30). However, applicant's specification recites a similar process on P. 37, lines 9-13, wherein "Fig. 15 illustrates … how the two central servers may be resynchronized following a failure in the transaction path. The synchronization engines use the synchronization log established by the terminal that notes the missing server acknowledgements". P. 38, lines 3-15 further details the synchronization process and specifically cites instances wherein should server X be unreachable by a terminal, server Y will forward all transactional information from the terminal that server X has not received because of failure. Therefore, applicant's arguments that the ability to "store the data received from the gaming machines... until such time as a transmission path to

the host server is restored and data can be transmitted" as taught by Nguyen do not sufficiently meet the limitations of the claim are not persuasive, as this is the procedure of synchronization taught applicant's specification as originally filed. See ¶0027-0029,0050 and 0082-0086 of Nguyen.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEAGAN THOMASSON whose telephone number is (571)272-2080. The examiner can normally be reached on M-F 830-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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